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ABSTRACT

Student financial aid is a major education industry. Three papers by educational professionals are presented as points of comparison. "Student Financial Aid Policies and Programs in Texas and California: A Comparison" (Stephen Janes) states that Texas and California have much in common; demographics in the two states are not radically different; college-going behavior of White, Black, and Hispanic students in both states follow similar patterns; both states maintain low- or no-tuition policies for public colleges; and Texas tends to finance its grant programs from increases in tuition at the institutional level. "Student Financial Aid Policies and Programs in New York and California: A Comparison" (Charles Treadwell) discusses the changing populations of New York State; competing demands on the state budget in both states; a history of higher education in New York State; student financial assistance in New York State; and the coordination of state and federal roles. "Higher Education and Student Financial Aid in the Pacific Rim" (Edward St. John) focuses on the two-way trade with Asian countries in the Pacific Rim and its relationship to California's recent economic development; the educational needs of Pacific Rim countries and their relevance to California; and the building of new kinds of partnerships. The document contains 39 references. Tables are included. (SM)

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THE EUREKA PROJECT

A Review of Student Financial Aid in California

Beyond the Borders:

A Discussion of Student Financial Aid and Educational Opportunity in Texas, New York and the Pacific Rim in Relationship to California

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March 1988

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PREFACE

Student financial aid has become a major and complex educational industry. This year in California alone expenditures will be approximately $1.5 billion in all forms of financial assistance—grants, loans, and jobs. It is not only large, it is also complex. Anyone who has been associated with student financial aid is soon struck by how complicated the rules and structure are and how the students and colleges must deal with a multitude of agencies and organizations.

Thirty years ago student financial aid in California was less than $10 million. The few government programs that existed were relatively simple in design. While funds were inadequate, the standards and procedures were comprehensible to all involved. Administration was, by today's standards, simple. Limited student financial aid, largely scholarships, was an activity funded by individuals, college endowments, and local groups. Even scholarships financed by PTA bake sales or similar activities were important to the total structure of financial aid.

Over the last three decades all financial aid has grown and its composition and sources of aid have markedly changed. In the last ten years loans have replaced grants and scholarships as the principal form of student aid. With a massive infusion of loan funds through commercial lenders, the nature of student financial aid has changed.

As student financial aid has assumed a larger role in postsecondary education, it has become more important to review the policies that have undergirded it. Policies, either as specifically adopted or developed in an evolutionary way, need to be reviewed for their past effect, current value, and future utilty. Problem policies need to be identified and policies appropriate for the balance of this century developed.

Concerns about student aid policies led to the creation of The Eureka Project, a privately organized, funded, and directed review of student aid policies in California. It is entirely funded by major grants from the James G. Irvine, Weingart, and John Randolph Haynes and Dora Haynes Foundations, and by a supplemental grant from the Atlantic Richfield Foundation.

The Eureka Project is under the general direction of a board of directors, with more technical and specific advice to the project given by a steering committee composed of representatives of interested groups and institutions in California. A staff of consultants has come together to direct and write the various studies under The Eureka Project.

The Eureka Project is studying the financing of higher education opportunities in California and the impact of current financial aid programs upon the formal structure of higher education and students. There is concern that the door of educational opportunity may be closing, that the health and vitality of quality independent institutions could be at risk, and that the current student financial aid system has a wide range of unintended consequences.

The Eureka Project anticipates issuing approximately a dozen reports. These reports will endeavor to stimulate policy review of student financial aid and financing of higher education in California and will be offered by the Board of Directors as thoughtful documents for that purpose. The reports will not necessarily represent the views of members of the Board of Directors or of the four California foundations whose grants have made The Eureka Project possible.

The Eureka Project is designed to look at California student financial aid policies and how they serve the public. Student financial aid policies are going to remain a subject of policy discussion and debate for the foreseeable future. Any policy discussion should benefit by several external reference points. Discussions should be more productive if they are in a context that extends beyond California's borders to Texas and New York to our trading partners and competitors in the Pacific Rim.

"Beyond the Borders" consists of three papers written for The Eureka Project by three individuals who have first-hand experience with their subject. They are presented as points of comparison and represent the view of the authors. The authors are Stephen S. Janes of the University of Texas at Austin; Charles Treadwell of the New York Higher Education Services Corporation; and Edward St. John of Pelavin Associates and a consultant to the Columbo Plan in the development of educational programs among member nations.

It is hoped that the studies from The Eureka Project will be useful references for individuals who will be deciding the future of student financial aid in California.

Arthur S. Marmaduke
Executive Director
The Eureka Project

EXECUTIVE SUMMARIES

Student Financial Aid Policies and Programs in Texas and California: A Comparison

- Texas and California have a great deal in common. Historical and economic influences in the two states are quite similar. Both states have more than doubled in size since 1950.
- Demographics in the two states are not radically different. Far more Texans, however, are native to their home state than are Californians. Texas families are slightly larger and younger than those in California.
- The college-going behavior of White, Hispanic, and Black students in Texas follows a pattern quite similar to that in California. In both states Whites are overrepresented while Blacks and Hispanics are less likely to enter college and do not persist at the same rates as Whites.
- California and Texas maintain low- or no-tuition policies for their public institutions of higher education, both states ranking among the least expensive in the country. Total direct educational costs in Texas tend to be lower than those of comparable institutions in California.
- Texas has taken an approach toward financing students in higher education that is quite different from that employed in California.
- Unlike California, Texas has not centralized the administration of state grant programs and Texas has no state scholarship commission. The Texas Guaranteed Loan Commission was only recently established and it is an independent agency. Student assistance programs in Texas are less structured than those in California and they are not well funded.
- Texas tends to finance its grant programs from increases in tuition at the institutional level and provides only modest direct cash outlays for student assistance at public institutions.
- The Texas contribution to student financial assistance is dwarfed by a substantial and growing reliance on federal student aid. With no state grant programs comparable to those in California as a resource, families in Texas must endure a severe economic downturn by leaning heavily on federally-guaranteed loans or foregoing higher education.
- There is little likelihood that Texas will centralize the administration of state student assistance programs in the near future. The state's current economic circumstances dictate against establishing new programs or the improved funding of those that now exist.
- Texas has consistently favored low tuition as the centerpiece of its effort to finance college students. California has followed a similar philosophy, while establishing and funding major statewide student assistance programs that have no real counterparts in Texas.

Student Financial Aid Policies and Programs in New York and California: A Comparison

As one researches the student assistance histories of each state, one is struck by the similarities and differences. No one can say that one system or approach is superior to another; thus, that is not the report here. Instead, differences in early history and political frameworks have dictated different paths to the goal of providing affordable higher education. Some of these points are summarized below.

Similarities

- The demographics of New York State and California reflect a growing minority component which is poorer, has more children and drops out of school at rates much higher than the White population.
- Despite significant state funding increases, the maximum grants within the need-based programs for both states represent a declining percentage of average tuitions for non-public colleges. Even when federal Pell Grants are included, the trend persists. One result of this has been that the Guaranteed Student Loan (GSL) program has emerged as the dominant source of aid in both states.
- In recent years, there have been new programs of aid established in each state which represent departures from trends of the 1960's and 1970's. For New York, it has occurred through specialized programs for part-time students, disadvantaged students, and academically exceptional students. In California, it has occurred through establishment of institutionally-based programs of student aid in the public sector.

Differences

- The higher education systems of both states are large and diverse. New York's system is characterized by a strong historical presence of non-public colleges and its public system did not formally begin until the late 1940's. By contrast, public higher education dominates California's history.
- The higher proportion of high-tuition non-public college enrollments in New York State drives a large need-based student grant program which is used to reduce net tuition differentials. However, larger public college enrollments in California result in higher per-capita taxpayer contributions for higher education.
- New York State chose to develop student loan programs as early as 1957, and has served as the guarantee agency for the federal Guaranteed Student Loan (GSL) program since 1965. California, on the other hand, did not directly administer the GSL program until recently because of the required state contributions. Instead, lenders provided more limited capital through the Federal Insured Student Loan (FISL) program.

Higher Education and Student Financial Aid in the Pacific Rim

Two-way trade with Asian countries in the Pacific Rim has become vitally important to California's economic development in the 1980's. During the past few years the State of California and municipalities in the state have made a concerted effort to expand trading partnerships with Asian countries through joint economic ventures. In the long run, however, a better understanding of education and training needs in Asian countries may help the state to build stronger foundations for new, cooperative patterns of trade and economic development with our Pacific neighbors. There are many apparent commonalities in the types of planning and management problems that confront higher education systems in Asia and California, although their systems are generally less developed and more centralized. Therefore, California's institutions of higher education can contribute to joint economic development through ventures with Asian governments and institutions that involve applied research, student exchange, and special training programs. This section explores the educational needs of Pacific Rim countries and begins to examine their relevance to California.

1. STUDENT FINANCIAL AID POLICIES AND PROGRAMS IN TEXAS AND CALIFORNIA: A COMPARISON

Texas and California have much in common. Their cultures were greatly influenced by those of Spain and Mexico. Both states are blessed with the economic and recreational benefits of extensive seacoasts, and they have depended greatly on oil and agriculture for economic development. Each shares a history resplendent with the richness of the American West, from the Alamo to Sutter's Mill, from fact to legend.

In terms of growth, California has long been the place to go—the promised land for those in search of the good life. Texas was more a melting pot of cultures and external influences in the nineteenth century than it has been in recent times. While the population of California was increasing sevenfold between 1920 and 1980, that of Texas had barely trebled during those sixty years. It is of note, however, that Texas has grown at a faster rate than California since 1970, as shown in Table A.

Just as the character of modern-day California can be traced in large part to the aspirations of enormous numbers of people seeking a new life there, so can we see the state of affairs in Texas in terms of its inhabitants. Though it may seem an unlikely prospect in the shadow of satellites and the electronic revolution, Texans have been influenced considerably by their environment: an enormous, insularizing geography. Thus, Texas politics and public policy are more characteristically regional and probably more conservative than is the case in California. Unlike the continuing influx of people to California, most Texans are born in their home state, as shown in Table B.

Family size and family income are not remarkably different between the populations of the two states, as Table B illustrates. In both states there is substantial disparity between the incomes of Blacks and Hispanics compared with those of Asians and Whites. Texans tend to have larger families than Californians, a fact of note to those planning for Texas education at all levels. Recent projections place the non-White population in the majority in Texas

TABLE A
Total Population Comparisons: Texas and California
(Millions of Persons)

Year	California	Texas	Ratio: Texas to California
1920	3.4	4.7	1.4
1930	5.7	5.8	1.0
1940	6.9	6.4	0.9
1950	10.6	7.7	0.7
1960	15.7	9.6	0.6
1970	20.0	11.2	0.6
1980	23.7	14.2	0.6

Source: Decennial censuses

TABLE B
Migration, Family Size and Family Income, Selected Ethnic Groups in California and Texas 1979-80

	Asian and Pacific Islanders	Black	Hispanic	White
Percent of current population				
born outside California (1980)	72.7%	56.7%	50.9%	54.2%
born outside Texas (1980)	87.3%	19.9%	26.2%	33.7%
Persons per family in California (1980)	3.7	3.4	4.0	3.0
Persons per family in Texas (1980)	3.8	3.7	4.2	3.2
Children born per 1,000 women				
California (1980) (ages 35-40)	2,212	2,859	3,323	2,253
Texas (1980) (ages 35-44)	2,484	3,314	3,707	2,637
Median family income, head of household (1979)				
California (ages 35-40)	$25,635	$18,439	$17,961	$27,489
Texas (ages 35-44)	$28,468	$18,042	$17,562	$28,466

Source: Decennial Census, 1980

within twenty years, largely due to anticipated growth in the number of Hispanic families.

Given the lower incomes of the Black and Hispanic populations—whose numbers will soon outstrip those of White citizens in Texas—and the gloomy forecast for the oil industry in the United States, Texas policymakers may find the next quarter century posing very difficult economic problems. Perhaps of equal importance to planners in higher education in Texas is the fact that the Texas school and college age population constitutes an even larger proportion of the total population than is the case in California, as shown in Table C.

Mirroring the characteristics of young members of minority groups in California, those in Texas constitute a significantly larger proportion of their age cohorts than do their parents of theirs. The contrast between Blacks in California and Texas is fairly substantial, as shown in Table D.

As with California, the Texas population has an increasing number of minority families with large numbers of children who will share in modest family financial resources. Consistent with other characteristics of their populations in Texas, the ratio of young people to families with children under age eighteen among Blacks and Hispanics is even greater than is the case in California, as shown in Table E.

The public finance structure in Texas has been severely constrained by the recent severe economic downturn. Appropriations for higher education were cut substantially in 1985. Reports by legislative analysts indicate that the state is nearing a net outmigration of highly skilled professionals and technicians. Despite the need for a stable and substantial tax base, there are no personal or corporate income taxes in Texas. Efforts to amend the state constitution to prohibit an income tax have gained ground with each session of the legislature. The state continues to place reliance upon regressive taxes, and

TABLE C
15- to 19-Year-Olds as a Percent of the Total Population

Year	California Percentage	Texas Percentage
1940	7.9	9.9
1950	6.0	7.8
1960	7.0	7.8
1970	9.1	9.8
1980	9.0	9.5

Source: Decennial censuses

Table D

Ethnic Shares of Youth and Parental Generations in California and Texas: The Percentage of 15- to 19-Year-Olds in the Population Compared with the Percentage of 40- to 44-Year-Olds, by Ethnic Group

	California Percentage of Cohort		Texas Percentage of Cohort	
	1970	1980	1970	1980
Hispanic				
15 to 19	17.4	23.1	21.4	24.9
40 to 44	15.0	16.5	16.2	18.0
Black				
15 to 19	7.6	9.4	13.6	14.2
40 to 44	6.4	7.8	11.0	10.5
Vietnamese				
15 to 19	N.A.	0.5	N.A.	0.3
40 to 44	N.A.	0.3	N.A.	0.2
White				
15 to 19	71.4	60.9	63.2	50.0
40 to 44	74.4	68.2	68.8	63.5

Source: Decennial censuses

in particular the sales tax mechanism, to shore up a weakening economy.

The relevance of the state's economy to education requires little elaboration, but demography puts a finer edge on current problems. Data provided by the Texas Education Agency indicate that during 1986-87 there were 3,209,515 students enrolled in elementary and secondary education in Texas. Of these, only 52.5% were White. Thus, Texas will experience a substantial growth among the traditional ethnic minority populations for the foreseeable future while the state's ability (or willingness) to finance education may be considerably weakened. Perhaps of more concern to the future well-being of the state, the participation rates in higher education for Blacks and Hispanics in Texas are low, as shown in Table F.

TABLE E

Ethnic Differences in Number of Children Per Family: Ratio of Persons 15 to 19 Years Old to Families with Children Under 18 Years Old California and Texas, 1980

Ethnicity	California	Texas
Black	.751	.808
Chinese	.684	.454
Filipino	.587	.474
Hispanic	.747	.751
Vietnamese	1.009	.872
White	.682	.662

Source: Decennial Census, 1980

The higher education participation rates for Whites in Texas have been consistent over the past few years, while those of Blacks and Hispanics reflect an overall decline. White students in Texas are proportionately overrepresented among the students who go on to college. The college-going behavior of White, Hispanic, and Black Texas high school graduates follows a pattern quite similar to that in California. Not surprisingly, the variation among the three groups in preparing themselves for admission, particularly for the more selective colleges and universities, follows the same pattern, as shown in Table G.

The retention rates of Black and Hispanic students enrolled in public postsecondary institutions in Texas show the same reversal experienced in California. Even though Black students in both states tend to enroll in college in greater proportion to their graduating cohort than do Hispanic students, Black students persist at lower rates after enrolling in public institutions. Likewise, retention rates of White students are markedly higher than for either Black or Hispanic students, as shown in Table H.

TABLE F

College-Going Rates of High School Students by Ethnicity in Texas

(1985-86 High School Graduates)

	Hispanic	White	Black	Total
Number graduating from high school	38,139	98,007	21,750	157,896
Number entering college	16,222	58,961	9,937	85,120 (54%)
Percent of cohort	24.2%	62.1%	13.8%	
Percent of ethnic cohort entering college	42.5%	60.2%	45.7%	
Percent of total graduates entering college	18.6%	67.5%	11.4%	

Source: Texas Education Agency

TABLE G

Demographic Profile of High School Students Taking the SAT or ACT in Texas by Ethnicity and Year

	1984 Graduates	1984 Test Takers	1985 Graduates	1985 Test Takers
Total students	161,512	90,308 (56%)	159,343	87,320 (55%)
Black students	23,895 (15%)	11,421 (13%)	22,555 (14%)	9,334 (11%)
Hispanic students	36,196 (22%)	17,134 (19%)	36,021 (23%)	16,476 (19%)
White students	98,873 (61%)	59,962 (66%)	97,596 (61%)	59,596 (68%)
Percent of ethnic cohort taking an admissions test:				
Black		48%		41%
Hispanic		47%		46%
White		61%		61%

Sources: The College Board and The American College Testing Program

TABLE H

Retention Rates of Undergraduate Students in Texas Public Institutions by Ethnicity

	Hispanic	White	Black
Percent enrolled in Fall 1983 who re-enrolled Fall 1984	66.3%	72.7%	63.1%
Percent enrolled in Fall 1984 who re-enrolled Fall 1985	65.6%	73.7%	61.8%
Percent enrolled in Fall 1985 who re-enrolled Fall 1986	68.9%	74.0%	63.3%
Average retention rate over three-year period	66.9%	73.5%	62.7%

Source: Coordinating Board, Texas College and University System

Differences in California and Texas census data and variations in the high school graduation rates and college-going behavior of their citizens do not account for what has clearly been a very different approach to financing college students in the two states. Texas, perhaps because of a provincial character fostered by its sheer physical size and (until now) seemingly limitless supply of energy-related revenues, has taken an approach toward financing students in higher education that is quite different from that employed in California.

Since no single agency oversees student aid in Texas, the only statement regarding student aid policy with statewide impact is that presented by the Texas Legislature:

> *"The legislature, giving due consideration to the historical and continuing interest of the people of the State of Texas in encouraging deserving and qualified persons to realize their aspirations for education beyond high school, finds and declares that postsecondary education for those who desire such an education and are properly qualified therefore is important to the welfare and security of this state and nation and, consequently, an important public purpose. The legislature finds and declares that the state can achieve its full economic and social potential only if every individual has the opportunity to contribute to the full extent of his capabilities and only when financial barriers to his economic, social, and educational goals are removed. It is, therefore, the policy of the legislature and the purpose of this Chapter to establish financial assistance programs to enable qualified students to receive a postsecondary education.* (Added by Acts 1975, 64th Legislature, page 2323, Chapter 720, §1).

Texas, like California, has had a longstanding commitment to provide for access to higher education. The most significant contribution Texas has made to financing higher education has been the state's tuition policy. Tuition rates in Texas have been held at remarkably low levels. In 1957, Texas "increased" tuition to $50 per year for residents and $200 per year for non-residents. Fourteen years later, tuition was raised to $4 per semester hour (with a $50/semester minimum) for residents and $40 per semester hour ($200/semester minimum) for non-residents. Maintaining the fourteen year cycle, tuition was raised again in 1985. Residents were required to pay $12 per semester hour, increasing on a sliding scale to peak at $22 per semester hour in 1993-94. Non-resident tuition was set at cost of education, roughly interpreted as $120 per semester hour.

By comparison with other states Texas is still a low tuition state, ranking 43rd nationally in resident tuition during 1985-86. As Table J indicates, Texas and California maintain comparable policies (California ranked 44th in 1985-86), but with a very major difference. Tuition costs are established by the Texas Legislature and are the same at all four-year public general academic institutions. Fees in California are not set directly by the legislature for the University of California, but they are for the California State University. Direct educational costs at the major research institutions in Texas are below those at California institutions with similar role and scope.

Both California and Texas have established a postsecondary educational institution of some kind within relatively short commuting distances of all their citizens. There is a community college, four-year college, or university within 50-75 miles of nearly anyone living in Texas. The low tuition at these institutions and their relative proximity to potential students is a direct outgrowth of the Texas policy to provide access to higher education for its citizens. Access is further promoted by relatively low admissions standards in Texas. Any recent high school graduate may enroll at the University of Texas at Austin, the state's most selective public institution.

Ease of access to higher education in Texas is somewhat constrained by the non-tuition costs students must meet. For the most part, Texas students depend upon their institutions for assistance or, more likely, they turn to federal student aid programs to meet the costs associated with cost of living and transportation. Of the $617,666,177 in total federal and state student aid resources available in Texas during 1985-86, more than half ($323,497,192) was in the form of loans. Another $142,457,956 came from federal grants, primarily through the Pell Grant Program.

While Texas may be considered reasonably generous in providing for access, the record is less exemplary as regards choice. In 1985-86 the state appropriated almost $52,000,000 for tuition equalization grants, but two-thirds of those funds were provided to Baylor University's Colleges of Medicine and Dentistry through an earlier arrangement that forestalled the need for Texas to build additional medical and dental schools.

The $19,233,398 funded from tuition set-asides in 1985-86 for the Texas Public Education Grant Program was shared by 34,194 students, for an average grant of about $560. At independent colleges, 14,318 undergraduate students were the beneficiaries of tuition equalization grants funded from general revenues totalling $17,272,812, for an average grant of about $1200. Given the substantial difference between average tuition and fees at public institutions and the comparable costs at independent colleges, the Texas tuition equalization program must be considered a modest investment in providing some measure of choice for the state's students.

> *"Historically, the state has never had an aggressively funded state grant program. According to a (recent) survey conducted by the National Association of State Scholarship and Grant Programs, Texas ranked 35th in the nation in available grant funds per student."*– From the report on Quality and Access of the Texas Select Committee on Higher Education, October 1986.

That brief statement summarizes what must be considered a major difference in student aid policy between California and Texas. While California ranked only twenty-third in that same study, its enormous student population and the long history of the Cal Grant programs have resulted in a grant corpus that should be the envy of educators and financial aid administrators throughout the state of Texas.

Another significant difference between California and Texas student aid programming is that Texas has no centralized state scholarship agency or commission. The Coordinating Board, Texas College and University System, maintains statutory oversight of several student financial assistance programs and operates some of them. That body is not, however, similar in character or mission to state scholarship agencies in California or other major industrial states. Its primary functions relate to maintenance of the overall structure of higher education in the state, with particular emphasis on degree programs and institutional resource allocations.

Until 1979, there was no statewide student loan guarantee agency in Texas. At that time, the legislature established the Texas Guaranteed Student Loan Corporation as "a public, nonprofit corporation charged with the responsibility of increasing the availability of loan capital for students. . . . " Even this agency is not a true child of the state, since it maintains an independent status roughly paralleling that of the U.S. Post Office. Complicating the administration of loan programs in Texas is the fact that the Coordinating Board manages the *state* student loan program, which predates the establishment of the Texas Guaranteed Student Loan Corporation.

In drawing comparisons between the approaches to providing financial assistance for college students in California and Texas it is not useful to discuss centralized state grant and loan administration. The dialogue must turn to the types and the nature of the programs offered. During recent years, Texas has provided a number of categorical student aid programs, primarily in the form of tuition exemptions, tuition waivers, and loan programs. Most of these programs are relatively modest in size. The total state contribution to student financial assistance is dwarfed by a substantial and growing reliance on federal student aid sources, as shown in Table I.

As Table I illustrates, the percentage of total student aid resources provided by Texas has dwindled steadily during the past five years. The figures in Table I do not include amounts "budgeted" for waivers of non-resident tuition. These funds were not

TABLE I
Overall Student Financial Aid Expenditures in Texas by Year and Source

	1982-83	1983-84	1984-85	1985-86	1986-87 (est.)
State funds	$ 94,186,296	$ 99,323,659	$ 92,613,350	$ 95,425,414	$ 97,063,845
Federal funds	228,645,832	290,974,349	425,718,686	472,390,600	460,453,025
State share of overall financial aid resources	29%	25%	18%	17%	17%

Source: Coordinating Board, Texas College and University System

truly appropriated, since they take the form of foregone income at the institutional level.

In 1985-86, $54,696,070 (or 38%) of the Texas contribution to state student assistance went to independent institutions, primarily in the form of tuition equalization grants for medical students. Texas appropriated $54,929,656 (or 8.9% of the total financial aid resources provided from all sources) for students attending public institutions. Almost half of that amount was in the form of loans. Taken in different terms, the state budgeted $54,696,070 for tuition equalization grants to fewer than 16,000 students attending independent institutions in 1985-86, while appropriating just over $25,000,000 for grants of some kind to almost 46,000 students attending public institutions. Of the latter, nearly $20,000,000 was funded through tuition set-asides administered through the institutions.

While California estimated funds approaching $210,000,000 for state-funded grants in 1986-87, Texas estimates were just over $22,000,000 for similar programs. By far the majority of the Texas estimates included the tuition set-asides mentioned above. Thus, estimates of outright cash outlays from Texas tax revenues for direct grants to students were only a few million dollars.

The only program in Texas that parallels the purposes of Cal Grant B is a program of state scholarships for ethnic recruitment. That program is restricted to ethnic minorities and was funded in 1985-86 at $425,840 for 514 recipients, as contrasted with the 24,592 students in California receiving over $33,000,000 from Cal Grant B.

Careful examination of the data describing student financial aid in Texas leads to the conclusion that the state has been somewhat penurious in providing direct financial support to college students. Much of the money provided by the state is not actually appropriated, but comes from the equivalent of assessments on institutional tuition revenues. Texas legislative history reveals no effort to provide a massive infusion of student aid funds, either through the establishment of new programs or through significant increases in appropriations for those that are now in operation.

It is important to note that Texas has never been generous in providing resources for most public services. The state is currently under stringent federal court mandates to improve state prisons and mental health facilities. Texas is also one of the Southern tier states now required to file a higher education desegregation plan with the U.S. Office of Civil Rights, a plan which involves a commitment to expend more effort and money to recruit and retain minority students and faculty. Texas provides less money than California for education at the elementary and secondary levels, as shown in Table J.

Texas enrolled approximately 750,000 full- and part-time students in postsecondary institutions of all types and control in 1985-86. These students shared in just over $600,000,000 in federal and state student assistance funds. Those attending public institutions benefited considerably from the state's policy to maintain tuition at a level roughly one-tenth the cost of education.

The failure of the Texas legislature to establish a centralized state scholarship and grant program funded from tax revenues has resulted in a growing reliance on federal student aid programs as a means of funding students in higher education. Although the future is not necessarily bleak in this respect, in all probability Texas college students will find it necessary to rely on loans as the "growth industry" in student assistance. Enrollment forecasts by the Coordinating Board predict an increase of almost fifteen percent in the number of Texas college

TABLE J

Costs and Support for Education in California and Texas

	California	Texas
Per pupil expenditures in public elementary and secondary schools (1983-84)[1]	$2963.00	$2784.00
Available grant funds per student (1985-86)[2]	74.30	30.80
Average resident tuition and fees (1985-86)[3]	673.00	741.00

[1]Source: U.S. Department of Education, *Digest of Education Statistics, 1985-86.*

[2]Source: National Association of State Scholarship and Grant Programs, *17th Annual Survey Report, 1985-86 Academic Year.*

[3]Source: Council for Postsecondary Education, State of Washington, *Tuition and Fee Rates: A National Comparison.*

students by the year 2000—another 100,000 students competing for dwindling student aid resources.

While the Texas legislature has not been aggressive in funding student aid programs, it has been attentive to the reform movement in education. Reforms were instituted in secondary education in the mid-1980s, with primary emphasis on improving daily attendance and reducing opportunities for students to participate in extracurricular activities if classroom performance falls below prescribed levels. The so-called "no pass, no play" rule continues to be heatedly debated throughout the state.

Basic skills tests have been mandated for students at several levels of education, including the implementation of a statewide requirement for rising junior basic skills tests at all public postsecondary institutions beginning in 1989. Similar kinds of tests have been implemented for public school teachers and within a short time the traditional College of Education curriculum will be modified to require general academic coursework through the B.A. with most education coursework moved to the equivalent of the Master's level.

The relevance of these reforms to student aid policy derives from the fact that the legislature and public debate in Texas now center on higher education, the reform movement apparently having run its course at lower educational levels. The 1985 session of the Texas legislature established a Select Committee on Higher Education "*. . . to make a comprehensive study of all issues and concerns relating to higher education in Texas, covering all components of the higher education system. . . .*" The committee, composed of outstanding citizens and legislators, completed its work and rendered a report to the legislature in February 1987.

Among the recommendations of the Select Committee were "adequate state funding of student financial assistance" and administration of all state student aid programs "by a single state entity." Whether for reasons related to the sagging Texas economy or because legislative sympathies did not fall in the direction of the committee recommendations, the legislature adjourned (after an extended session) without establishing any major student aid programs and with no clear indication that state student aid administration should be centralized. At this writing, there is no discussion of implementing new programs or centralized administration of state student assistance programs.

The much-touted federal/state partnership in student financial aid is, in Texas, not an equal partnership. Texas maintains a status akin to that of a relatively silent partner. Texas cannot be faulted when its tuition rates are compared with other states. This brief comparison illustrates that California has also managed to maintain a low- or no-tuition structure while contributing far more generously to the well-being of its college students.

2. STUDENT FINANCIAL AID POLICIES AND PROGRAMS IN NEW YORK AND CALIFORNIA: A COMPARISON

The Populations of New York State: A Changing Mix

Overview

For most of its history, New York State has been the most populous state in the nation. Its population, last counted at 17.6 million in 1980, displayed its most rapid growth in the early 1800's. During that time, the state's population doubled every 20 years, with the majority of residents living in rural areas until 1870.

The industrial era of the late 1800's and early 1900's saw continued growth, but at a slower pace. It took 40 years for the state's population to double (1870-1910), and the population did not double again for another 60 years, reaching its peak in 1970 at 18.2 million.

As people moved off the farm and to the city, and as new waves of immigrants from Europe and other continents found their way to Ellis Island and the state's boundaries, pressures were put upon urban centers to accommodate the influx of people. Whereas in 1840, 81 percent of the state's population resided in rural areas, by 1920 83 percent of the state's population lived in urban areas.

In comparing the growth patterns of New York and California, it can be noted that California surpassed New York in population by the 1970 census, and its population doubled roughly every 20 years between 1920 and 1970.

The two states have experienced much different recent population trends, with California's growth continuing and New York realizing its first population decline between 1970 and 1980. However, New York demographers are projecting a slight increase in population, rising from 17.6 million in 1980 to 18.9 million by 2010.

TABLE A
Population Comparison, New York State vs. California, 1920-1980
(Millions of Persons)

Year	New York State	California
1920	10.4	3.4
1930	12.6	5.7
1940	13.5	6.9
1950	14.8	10.6
1960	16.8	15.7
1970	18.8	20.0
1980	17.6	23.7

Source: (1) New York State Department of Economic Development, State Data Center
(2) The Eureka Project.

A New Mix—Where's the Youth?

Both New York and California exhibit comparable trends in the proportional growth of 15- to 19-year-olds within the overall population. Between 1950 and 1980, this group represented an increasing percentage of the overall population. However, because of changing birth rates within the last two decades, the growth of the 15- to 19-year-old cohort appears to have peaked in New York. It numbered 1.6 million persons in 1980 and is projected to decline to 1.1 million by 1995.

The loss of a half million people from the prime college feeder population will no doubt impact on recruitment strategies for colleges and universities in the state. Pressures for new marketing approaches will likely continue through the beginning of the next millennium as projections indicate that the 15- to 19-year-old cohort in New York will drop from 9.1 percent of the total population in 1980 to 6.7 percent in 1990 and stabilize near that figure through the year 2010.

The aging of New York's population will continue through the foreseeable future. Between 1980 and 2010, the proportion of the state's population under 15 years old will decline from 21.2 percent to 18.0 percent. The proportion of the population between the ages of 15 and 64 will be unchanged at 66.5 percent. However, those residents 65 and over will increase by 36 percent by 2010 and will comprise 15.5 percent of the total population that year. In addition, the median age of New York's population will rise from 31.9 years in 1980 to 40.6 years in 2010.

Immigrants—Then and Now

New York continues to be characterized as a state of immigrants. During the early part of the 20th

TABLE B

15- to 19-Year-Olds as a Percent of the Total Population, New York State vs. California

Year	New York State	California
1940	8.3%	7.9%
1950	6.1	6.0
1960	6.5	7.0
1970	8.6	9.1
1980	9.1	9.0

Source: (1) New York State Department of Economic Development, State Data Center
(2) The Eureka Project

TABLE C

New York State Population by Selected Racial Group, 1920-1980

(Number in Millions)

	White		Other	
Year	Number	% of Total	Number	% of Total
1920	10.2	98	0.2	2
1940	12.9	96	0.6	4
1960	15.3	91	1.5	9
1980	14.0	80	3.6	20

Source: (1) New York State Department of Economic Development, State Data Center

TABLE D

The Relative Percentages in New York State's Population of 15- to 19-Year-Olds and 40- to 44-Year-Olds, by Selected Ethnic Group

	Percentage of Cohort, 1970	Percentage of Cohort, 1980
Hispanic		
15-to-19	N/A	10.5
40-to-44		11.4
Black		
15-to-19	12.7	16.3
40-to-44	11.9	15.3
Asian		
15-to-19	N/A	1.4
40-to-44		2.4
White		
15-to-19	86.0	65.7
40-to-44	86.8	65.6
Other		
15-to-19	1.3	6.1
40-to-44	1.3	5.3

Source: New York State Department of Economic Development, State Data Center

TABLE E
Family Size and Family Income in New York State for Selected Ethnic Groups, 1980

	All	Black	Spanish Origin*	Asian and Pacific Islander	White
Persons Per Family	3.3	3.5	3.6	3.8	3.2
Children born per 1,000 Women 35-to-39	2,228	2,444	2,567	1,834	2,160
Median Family Income Head of Household 35-to-44	$21,801	$14,930	$12,165	$23,751	$23,800

Source: New York State Department of Economic Development, State Data Center
*May be of any race

century, the immigrants were from war-torn Europe. They were followed by Blacks migrating north from poorer southern states. Each group was looking for economic opportunity. The most recent waves of immigrants have been Hispanics and Asians. The combination of these series of immigrants (and more precision in census reporting) have produced changes in the ethnic profile of the state's population.

In comparing New York State with California, there are differences and similarities. Both states show a growing non-White population, a function of immigration trends and higher birth rates for minority groups. New York State shows a rapidly growing Black population while California is experiencing rapid expansion of its Hispanic population. The two states differ in that there is relative balance between younger and older age cohorts by ethnic group in New York State, whereas in California the non-White populations comprise a larger percentage of younger traditional college-age populations.

Competing Demands on the State Budget

Indices which measure characteristics of ethnic groups are comparatively similar between California and New York. Blacks and Hispanics exhibit larger family sizes, higher numbers of children born, and much lower median family incomes than White residents. The decline of children produced by Whites in New York has been marked since 1970, thus increasing the proportion of minority children among school-age populations for the remainder of this millennium and into the next.

Statistics indicate that certain minority students are less likely than Whites to graduate from high school and enter college, an experience similar for New York and California. This implies that additional resources are needed to counsel Black and Hispanic students on their college potential and to remedy deficiencies in academic preparation occurring at the elementary and secondary levels. Can New York, which ranks among the highest states in terms of combined state and local taxpayer burden, find the additional resources necessary to increase the high school and college graduation rates of minority students which, by the year 2000, will represent over one third of the state's college-age population?

TABLE F
Retention Rates in New York State, 1984

	Black	Hispanic	Asian	White
Ratio of 12th graders to 9th graders	47	43	100	83
Ratio of first-time, full-time freshmen to 12th graders	32	31	96	55

Source: New York State Education Department

Higher Education in New York State—A History of Growth and Diversity

The Early Years—Independent Higher Education Came First

Higher education in New York State predates the existence of the state itself. Its origins evolved from a public policy involving taxpayers' funds and an early presence of independent higher education institutions.

New York's first official acknowledgment that advanced levels of education were worthy of public support occurred in the 1740's when the legislature of the Colony of New York passed an act for raising money by public lottery for the advancement of learning and the founding of a college. In 1754, the King of England granted a charter for the establishment of Kings College (now Columbia University), the first institution of higher education in New York. These early beginnings were not, however, without controversy regarding whether to establish a public or private system.

In 1784, the Legislature established the University of the State of New York and the Board of Regents. This began the current unique role of the Regents as overseers of all education in the state, from pre-kindergarten to postdoctoral and professional. No other state educational system has a parallel.

Toward the end of the 18th century, public pressure mounted for the establishment of additional colleges. This "market demand" translated into the establishment of several colleges opened with the help of private endowments, thus establishing the early pattern of independent sector dominance of higher education in the state.

The Normal Schools—A Public Sector

During the early 19th century, attention focused on the development of strong elementary and secondary school systems across the state. Later in the 19th century, however, the combined pressures of population growth and increased emphasis on elementary and secondary education created demand for the establishment of state-sponsored "normal schools." These schools were teacher training institutes which later evolved into state teachers colleges. They were established under the control of the State Department of Public Instruction, which later became the State Department of Education. The colleges would ultimately become part of the State University of New York.

The middle 1800's witnessed a significant expansion of higher education in the state. It also saw the inception of a tuition-free policy for some parts of the higher education system. In 1847, the Free Academy was established in New York City and was followed by the inception of the Normal College in 1870. These two institutions later went on to become the College of the City of New York (City College) and Hunter College and represented the first tuition-free sector of higher education in the nation.

The beginnings of a state university system were also visible during this time period. A select committee recommended the creation of a state university, free to all. However, a formal state university system would not be established for another 90 years!

Federal Support Begins

It was at this point in time that the federal government stepped in to alleviate some of the pressures mounting for further higher education development. The historic Morill Land Grant College Act of 1862 provided the state with revenues to expand higher education. Cornell University was founded using these revenues, which were generated by the sale of federally owned lands.

From the late 1800's to the depression era of the 1930's, institutions matured through growth and refinement of their purpose as normal schools became four-year institutions and academies became colleges. In addition, many specialized, church-related higher education institutions and institutions dedicated to the education of women were created.

During the 1930's, the state established temporary Emergency Collegiate Centers with federal assistance for the purpose of educating adults, many of whom were unemployed. Although discontinued in the late 1930's, these institutions reflected the ability of the state to step in with specialized support as the need developed.

By World War II, New York State possessed the largest number of colleges in the country, largely due to the healthy expansion of the independent sector.

Anticipating a shortage of higher education facilities during the post-World War II period, the state developed a formal plan which led to the establishment of five state institutes for applied arts and sciences. Structured so as to serve the needs of local communities, these institutes would later evolve to become community colleges.

A Public University System at Last

The most significant step toward the development of a state college system occurred 200 years after the first legislative activity related to higher education. In 1946, the findings of the Temporary Commission on the Need for a State University led to 1948 legislation which formally established the State University of New York (SUNY). At that time, SUNY consisted of over 30 colleges of higher education that had evolved from normal schools for teacher education. The same law also established state aid to community colleges and to the public colleges located in New York City, which later became the City University of New York.

The next two decades evidenced rapid growth of the higher education system in every operational term. Between 1950 and 1960, the number of higher education institutions doubled to over 200, with the majority of the new institutions in the public sectors. Dramatic building programs were approved by the Governor and Legislature to provide adequate facilities for the burgeoning enrollments. And the planning process for higher education was formalized through legislation passed in 1961.

The growth of the public sector became evident during this time period. Overall enrollments increased from 321,100 in 1950 to 764,200 in 1970, and the share of those enrollments found in the public colleges and universities grew from 31% to 59%. By 1967, full-time undergraduate enrollments at public higher education institutions had surpassed those at the independent institutions for the first time in the history of the state.

That trend continues today with 56% of full-time undergraduate students enrolled at public colleges in 1986, 40% at independent colleges, and 4% at degree-granting proprietary schools. However, proportionally more students attend higher education at non-public institutions in New York State than the national average by a factor of two to one; that is, 44% of students statewide are enrolled in non-public higher education in New York while the national figure is 22%. By comparison, California enrolls 13% of its higher education students in non-public sectors. Clearly independent colleges are still a major presence in New York State.

Student Financial Assistance in New York State—A Proud Tradition

Overview

New York State has had an extensive history of substantial financial support for higher education. State expenditures for scholarships, fellowships, special awards, tuition assistance and other programs totaled over $470 million in 1986-87. Yet, this expenditure is dwarfed by the state's $3.7 billion contribution to direct institutional funding for both the public and independent sectors of higher education. Supplementing this funding is another $1.5 billion in federal student assistance, half of which is within the Guaranteed Student Loan (GSL) program.

To tell New York's story of non-loan student financial assistance is to describe two primary areas: scholarships and need-based grants. The historical bibliography for this topic is punctuated with special commissions, studies, legislation, and public debate which lead to either the creation of or improvement of programs of financial assistance in these two major category areas.

A review of that history shows that New York's involvement was focused on the needs of academic achievers during the late 19th century and early 20th century. This was the era of scholarships and fellowships which were tailored to specific needs. It wasn't until the post-Sputnik era of the later 1950's and early 1960's that the state began to expand its financial support for students to include broader programs of need-based grants to a wider student population. Predating the Great Society efforts of the federal government, New York chose to shift the emphasis of its funding to a need-based grant program, established in 1961 as the Scholar Incentive Program and revamped in 1973-74 as the Tuition Assistance Program (TAP). That one program has grown to the point where it now provides 29% of the undergrad-

uate need-based financial aid dollars provided by all states combined.

New York's financial aid policy reflects the nature of its postsecondary system. That is, the dominance of independent colleges and the early tuition-free history of the State University of New York and the City University of New York provided the dynamics for a state policy which sought to minimize net student tuition charges through a combination of scholarship and grant program funding. As fiscal pressures brought the initiation of tuition at the State University of New York (1963) and at the City University of New York (1976), new demands were put on the state's need-based grant program to respond to public sector students showing financial need. Since then, the Governor and Legislature have sought to maintain a net cost balance for students through the TAP program while meeting specific access and manpower needs through specialized programs of aid.

The following narrative describes the historical evolution of the major scholarship and grant programs sponsored by New York State.

The Origins of New York's Scholarship and Grant Programs

New York has the most comprehensive state student financial assistance programs in the nation. State expenditures for grants and scholarships total over $472 million in 1986-87, almost three times the amount expended by the state of California. On a nationwide basis, New York provides over 26% of the total grant and scholarship aid provided by all states combined, a significant disproportion when it is noted that New York enrolls only 8% of the nation's higher education enrollments.

The state's student financial assistance program began in 1867 with the establishment of the Cornell University Scholarship. That program provided $200 tuition grants for attendance at the state's land-grant college. In 1913, the nation's first state-based broad commitment to higher education access was initiated through the establishment of the Regents College Scholarship program. That program provided $100 per year to 750 outstanding high school seniors, based on competitive examination.

The number of new Regents scholarships increased in the post-World War II era to over 6,000 by 1960 and peaked at almost 20,000 by the late 1960's. The amount of the award was increased to $350 in 1946, $750 in 1958, and $1,000 in 1964.

Several other undergraduate and graduate scholarship programs were created to meet targeted needs. The Child of Disabled or Deceased Veterans Award was begun in 1936 with 40 awards based on a statewide competition. It was followed in 1949 by the Medical and Dental Graduate Scholarship program, in 1956 by the Regents Nursing Scholarship program and in 1958 by fellowship programs for college teaching and a graduate scholarship program (Lehman Fellowship). Between 1944-1962, specialized short-term programs were begun for engineering and science studies and for advanced nursing, but most were discontinued when immediate manpower needs terminated.

The late 1950's found the state bracing for a major influx of new students brought about by the post-World War II baby boom. Several study commissions were appointed with the objective of restructuring the state's approach to the expansion and financing of higher education. In response to the recommendations of these study groups and emerging public sentiment, the state Legislature enacted dramatic change to the state's financial aid programs in 1961.

Grant Program Funding—The New Majority

A new, non-competitive program of direct aid to students was established, the Scholar Incentive (SI) program. It was made available to all full-time students, graduate and undergraduate, regardless of income. The SI program was seen as an alternative to institutional aid (which had been recommended by several of the study commissions but which would not occur until 1968 through the establishment of Bundy aid), and was intended to offset escalations in tuition, particularly at the independent colleges.

Prior to this time, state financial aid programs were either small specialized programs or competitive scholarships. The Scholar Incentive program was directed toward the masses of students going, or planning on college. Awards were based on state net taxable income (a method of need determination originating in 1958 within the Regents College Scholarship program and continuing today through

TABLE G

Major State-Sponsored Student Financial Aid Programs in New York State, 1986-87

	Program	Number of Recipients	Award Amounts (in $1000)
I.	Scholarships, Fellowships and Special Awards–		
	Regents College Scholarship	56,280	$ 13,446
	All Other	13,445	14,201
II.	Tuition Assistance Program	315,532	398,855
III.	Aid for Part-Time Study	7,800*	5,100
IV.	Educational Opportunity Programs	32,626	24,200
V.	SUNY and CUNY Tuition Reimbursement and Supplemental Tuition Assistance	13,400*	4,200
VI.	Supplemental Higher Education Loan Financing (SHELF)	865	6,900
VII.	College Work Study Reimbursement for Independent Colleges	61,512†	5,300
	Grand Total	501,460‡	$472,202

Source:
(1) New York State Higher Education Services Corporation
(2) New York State Education Department
(3) New York State Dormitory Authority
(4) New York State Division of the Budget

* Estimated
† 1985-86 data
‡ Does not represent an unduplicated count

the Tuition Assistance Program) and were limited to tuition only.

The Scholar Incentive program provided the basis for rapid growth in the state's student financial aid commitment. Despite an expansion in the number of Regents college scholarships, the Scholar Incentive program emerged as the largest state financed aid program. By 1965-66, Scholar Incentive expenditures of $32.4 million surpassed those of the Regents program ($30.5 million), evidencing a shift from merit to income-based program funding which continued.

The Scholar Incentive program had several unique features, some of which endure today through its successor program, the Tuition Assistance Program (TAP). It was an entitlement program, having no limitation on either the amount of annual expenditures or the number of annual awards. That feature remains unique among state need-based grant programs offered nationwide. The amount of the award was scaled to state net-taxable income. SI awards could be used in combination with Regents scholarships provided the total did not exceed tuition. The program was initially available to all students without regard to income.

The late 1960's also saw other additions to the state's commitment for student financial aid. In 1966, the Lehman Fellowship program was initiated to attract the highest quality students in the nation to graduate study in New York State in the social sciences and public and international affairs. Competitive awards were provided for up to $5,000 for the first year of study and $4,000 for each additional year. In the late 1960's, the state initiated special educational opportunity programs for those students deemed educationally and economically disadvantaged. Funds were provided to establish such programs at all three major sectors of higher

TABLE H

A Comparison of Expenditures for the NYS Scholar Incentive Program and the Regents College Scholarship Program for Selected Years

Academic Year	Expenditures (in millions) Scholar Incentive	Regents Scholarships	Total
1961-62	$ 7.6	$15.4	$23.0
1965-66	32.4	30.5	62.9
1969-70	35.9	32.3	68.2
1973-74	51.6	30.8	82.4

education in the state: the State University, the City University, and private colleges and universities.

In 1966, the State Board of Regents commissioned the College Entrance Examination Board to review all state student aid programs with the objective of improving their effectiveness in providing educational opportunity beyond high school. The primary recommendation was adopted by the Board of Regents in its 1967 policy document entitled "Freedom to Pursue a College Education." It called for the expansion of the state's commitment toward need-based financial aid primarily through the expansion of the Scholar Incentive program rather than through establishment of additional scholarship or fellowship programs. Thus, the recommendation of the Regents was to double the maximum Scholar Incentive grant to $1,000 per year at both the undergraduate and graduate level. Interestingly, the long-term goal cited by the Regents as a basis for this recommendation was that the maximum Scholar Incentive award be equal to the *total* residential costs of a typical independent college in New York. Implementation of that recommendation today would require a maximum grant of something over $12,000 per year (versus the current $2,850 TAP maximum)!

The Regents also called for the doubling of Regents college scholarship recipients (then receiving up to $1,000 per year, versus the current $250 maximum), establishing a new pre-college opportunity scholarship, and initiating financial aid to part-time students.

Legislative changes were made to the Scholar Incentive program for the 1969-70 academic year. They were, however, somewhat short of the recommended amounts, and included:

(1) Raising the maximum SI award from $500 to $600 for all undergraduate and graduate students (thereby eliminating the differential maximum awards for first year and second year graduate students),
(2) Establishing a family income ceiling of $20,000 for both undergraduate and graduate students, and
(3) Extending SI benefits to students enrolled in hospital schools of nursing and approved two-year business schools.

Implementation of these changes boosted Scholar Incentive payments to $51.6 million by 1973-74. Average awards increased from $165 in 1969-70 to $223 in 1973-74.

By 1973-74, the Scholar Incentive program accounted for 63% of the total $82.4 million expended for state grants and scholarships. The SI program had become increasingly oriented toward undergraduate study with graduate awards actually decreasing in dollar amount during the late 1960's and early 1970's.

The 1970's—Establishment of Today's Structure

The early 1970's saw the occurrence of the most dramatic change to the state's financial aid assistance programs. These changes were in response to recommendations of several study groups and regulatory bodies, including:

(1) The State Board of Regents who, in January of 1972, recommended increasing Scholar Incentive payments up to $1,500 per year for undergraduate and graduate study,
(2) The 1973 Keppel Report, which recommended a student "Bill of Rights" guaranteeing full access for at least two years of college to all students, with outright grants covering two-thirds of costs at all schools,
(3) The 1973 report of the New York State Senate which discovered a proliferation of financial aid programs without adequate central administration, and
(4) The 1974 report of the Select Committee on Higher Education which reported on hearings held throughout the state and which established the legislative framework for the restructing of the Scholar Incentive program.

In changing its financial programs, New York was seeking to achieve two objectives:

(1) Maximize access to higher education for all qualified students, and
(2) Foster a competitive environment with the net effect being an equilibrium between the public and independent sectors.

Research had found that Scholar Incentive program awards were no longer sufficient to significantly aid students in meeting independent college costs. The $265 average SI award for students at independent colleges in 1973-74 represented only 10 percent of the average tuition at that sector, while the $600 maximum award represented only 22 percent of tuition. Additionally, public hearings held by the Legislature revealed that the Regents College Scholarship program was designed to meet a need that no longer existed (encouraging bright students to attend college) and that a larger need existed for expansion of need-based grants.

Thus, the 1974 Legislature reduced the Regents College Scholarship award from $1,000 to $250 for all recipients regardless of income. In addition, the Scholar Incentive program was greatly modified and renamed the the Tuition Assistance Program (TAP). The major characteristics of TAP were:

(1) A $1,500 maximum award, limited by tuition,
(2) A continuous sliding scale of awards, based on state net taxable income (replacing the previous step-function award reduction formula),
(3) A reduction in annual TAP awards of $200 after two years of payments are received by the student, and
(4) The redefinition of financial independence for students, according to federal standards.

The establishment of the new TAP program in 1974, and the setting of its maximum award to 150% higher than the old Scholar Incentive maximum, signaled the beginning of a period of dramatic growth in the state grant programs. Between 1973-74 and 1975-76, TAP expenditures more than doubled to over $110 million. In addition, the number of student recipients grew by 20% and the average award increased from $233 in 1973-74 to $417 in 1975-76.

On an administrative level, the 1974 Legislature also created the Higher Education Services Corporation, the centralized financial aid agency for the state. The Services Corporation (HESC) was created by combining the non-profit Higher Education Assistance Corporation, which administered student loans, with the Regents Examination and Scholarship Center which administered the grant and scholarship programs of aid. The Services Corporation began operation in 1975.

From 1975 through the present, the TAP program has continued to expand, aided by periodic legislative fine tuning and increased award levels. Maximum eligible income levels were increased from $20,000 to $32,000 (net taxable)* and award levels were changed as follows:

TABLE I

Maximum Undergraduate Award Levels for New York State Tuition Assistance Program (TAP), 1974-1986

Year	Maximum Award
1974	$1,500
1978	1,800
1981	2,200
1984	2,700
1986	2,850

Other TAP changes of significance included the following:

1976—100,000 additional students became TAP-eligible when the City University of New York began charging tuition to undergraduate City residents.

1976—The Legislature tightened the definition of financially independent student, virtually requiring parental income consideration for all students under the age of 22, to reduce the growth rate of TAP awards for students who claimed to be independent.

1977—The Legislature modified the rules for financial emancipation and specified a lower maximum award and a more conservative award reduction schedule for single emancipated students.

*Net taxable income results after subtracting NYS exemption allowances and deductions from adjusted gross income. While TAP's award distribution formula is different and distinct from national analysis systems, TAP is categorized as a need-based grant program by the Natonal Association of State Scholarship and Grant Programs (NASSGP).

1979—The Income Verification Program was initiated which allowed direct comparison of income reported on TAP applications with that reported on state income tax returns. The resulting recalculated TAP awards produced a net savings to the state of $3.7 million that year.

1981—A new Supplemental Tuition Assistance Program was authorized which added one additional year of TAP aid, if needed, for students who are educationally disadvantaged and who take remedial courses.

1986—Differential maximum awards were established for non-profit versus profit-seeking independent institutions.

TABLE J

New York State Student Grant and Scholarship Expenditures for Selected Years, 1961-62 Through 1986-87

Academic Year	Expenditures (in millions) TAP/SI	Regents Scholarships	Total
1961-62	$ 7.6	$15.4	$ 23.0
1965-66	32.4	30.5	62.9
1969-70	35.9	32.3	68.2
1973-74	51.6	30.8	82.4
1977-78	207.1	22.1	229.1
1981-82	285.8	19.3	305.1
1986-87	398.9	27.6	426.5

Source: NYS Higher Education Services Corporation

The 1980's—A Rebirth of Special Purpose Programs

The 1980's have witnessed the initiation of several special purpose scholarship and award programs, at the state and federal level, with targeted recipient audiences. In retrospect, the 1980's may be more like the 1940's and 1950's in New York as manpower needs and other special purposes appear to have become more a focal point for policymakers and legislators than at any time during the prior two decades. During the 1980's, the following programs have been established: Child of Deceased Police Officer-Firefighter Award; Empire State Scholarships and Fellowships; Health Service Corps Scholarships and Fellowships; Health Care Professional Opportunity Scholarships; Vietnam Veterans Tuition Assistance; Regents Professional Opportunity Scholarships; Regents Physician Loan Forgiveness; Aid for Part-Time Study; Scholars for Excellence; and New York Transit Authority Aid. As a result of these new programs, overall scholarship funding has begun to increase again after several years of decline.

Some policy observers are concerned that the initiation of targeted scholarship programs may drain potential funding away from the need-based tuition assistance programs.

Examination of overall funding levels, however, shows that tremendous increases in state funding have been made available for the TAP program. Indeed, over the last nine years, the program has nearly doubled in size, at a time when degree-credit enrollments have dipped slightly statewide. And independent college and university students have directly benefited from TAP program funding. In the past decade, TAP funding for independent college students has increased by nearly 150% to $177.2 million, with that sector's market share increasing from 38.9% to 44.4%, slightly higher than its 40.8% share of degree-credit enrollments.

TABLE K

New York State Tuition Assistance Program Funding in the Independent Sector

Academic Year	Amount (in millions)	Percent of Total
1973-74	$ 22.3	43.3%
1974-75	37.1	47.1
1976-77*	71.7	38.9*
1978-79	105.1	46.6
1980-81	118.2	47.0
1982-83	125.0	41.9
1984-85	167.5	43.9
1986-87	177.2	44.4

Source: NYS Higher Education Services Corporation

*First year that City University resident students became eligible for TAP.

In terms of absolute number of dollars, the $417.5 million expended by New York on need-based programs in 1986-87 is almost three times the amount spent by California. Yet, slow progress in federal funding, and tuition increases which during the 1980's outstripped the Consumer Price Index,

TABLE L

State-Sponsored Undergraduate Need-Based Grant and Scholarship Programs for Selected States, 1969-70 and 1986-87

State	1969-70[1] $ (In millions)	1969-70[1] #	1969-70[1] Avg. Award	1986-87[2] $ (In millions)	1986-87[2] #	1986-87[2] Avg. Award
New York	$58.8	263,000	$224	$417.5	328,270	$1,272
California	12.3	14,680	837	131.1	68,801	1,906
Pennsylvania	51.9	77,400	671	103.4	115,043	899
Illinois	26.0	38,475	676	132.9	103,800	1,280
Michigan	12.5	24,030	526	66.9	42,236	1,585

Sources:
(1) "Higher Education in New York State," A Report to Governor Nelson A. Rockefeller from the Task Force on Financing Higher Education, 1973
(2) National Association of State Scholarship and Grant Programs, 18th Annual Survey Report, 1986-87 Academic Year
*Does not include funds appropriated directly to institutions.

continue to create pressure for increases in Tuition Assistance Program funding.

The Coordination of State and Federal Roles—How Much is Enough?

Scholarships and Loans— Early Examples of Coordination

The interrelationship between New York State and the federal government in the area of higher education financing dates back to the 1860's when the state established the Cornell University Scholarship program. Through that program, the precedent was established for state action complementing federal initiative in providing opportunity for higher education in the state.

A more recent example of the state-federal interrelationship can be found within the Guaranteed Student Loan (GSL) program. New York was the second state in the nation to establish a student loan program through the 1957 creation of the New York Higher Education Assistance Corporation (HEAC). The loan program began with a modest $4 million accumulation of gifts and bequests and grew to become the largest single source of financial aid in the state, with over $10 billion in loans being guaranteed since then.

The New York program of student loans became the cornerstone program for financial aid in the state almost from the very beginning. Whereas in 1961-62, $7.6 million was provided by the state for Scholar Incentive grants, students borrowed $12.5 million in student loans. By 1965-66, the $69.4 million in student loans (provided through private capital) eclipsed the $62.9 million in combined Scholar Incentive and Regents Scholarship funds provided by the state. The reliance on student loans continues today with student and parent loans representing nearly two-thirds of the financial aid dollars administered by the state's financial aid agency, the New York State Higher Education Services Corporation.

As the New York guaranteed student loan program evolved, the Legislature made several changes which added state support. In 1958, within a year after its enabling legislation, the loan program benefited from direct state appropriations. In 1961, the Legislature established that loans would be interest-free while the borrower was in college and the borrower would pay only 3% after leaving school, with the state paying additional interest of up to 3%.

Growing Federal Loan Activity and the Creation of a Centralized Agency

The federal government initiated its Guaranteed Student Loan Program in 1965, at a point in time when 19 states had established guaranteed loan programs similar to New York's. Most of the states were in the northeast and mid-Atlantic regions of the country. The Higher Education Act of 1965

TABLE M

A Comparison of Student Aid Sources in New York State for Selected Years, 1961-62 Through 1986-87

Academic Year	(in millions) Grants and Scholarships	Guaranteed Loans
1961-62	$ 23.0	$ 12.5
1965-66	62.9	59.4
1973-74	82.4	146.1
1981-82	305.1	1,162.8
1986-87	426.5	809.5

Source: New York State Higher Education Services Corporation; excludes multi-state guarantor loan volumes

recognized the existence of these state programs by incorporating them into the federal program rather than establishing an entirely separate program. In addition, the federal program statute and early regulations were modeled largely after the New York program.

New York continued to augment the activity of the federal student loan program. In 1972, the state Legislature authorized HEAC to guarantee loans to students who did not qualify for full federal interest benefits. It also eliminated the Corporation's guarantee reserve fund by providing that the state would appropriate and pay to HEAC such sums as would be necessary to pay the cost of defaults in any fiscal year. Thus, the full credit of New York was placed behind the Corporation's guarantee of federal student loans and the reserve fund to cover defaults was no longer required. This state support has enabled New York to charge one of the lowest student insurance premiums in the nation, thus enhancing student access.

The creation of a centralized financial aid agency made the state well positioned to receive the benefits of the federal higher education amendments of 1976. The primary impact of that legislation on the student loan program was to strengthen existing state guaranty agencies and to encourage the establishment of such agencies in states that did not have them. Congress had found that the loan program was more efficiently operated by state agencies than it was in states (like California) where the Federally Insured Student Loan (FISL) program was used. Increased subsidies to state agencies made it possible to operate loan programs on a self-financing basis. At the time the 1976 amendments were passed, there were 26 state agencies in the loan program. After the passage of the 1976 amendments, the remaining states moved to establish guaranty agencies and now all states have such agencies.

During the 1970's, New York initiated supplemental loan programs for medical and dental students and for vocational school students. However, in the late 1970's the state Legislature phased out the vocational school loan program, giving those schools two years to join the federal loan program.

Grant Program Coordination—More to Come?

The interaction between the major federal and state student grant programs available in New York can best be described as "arms length coordination." While there is some integration via the State Student Incentive Grant (SSIG) program, it has been limited. The Tuition Assistance Program has had, since its inception (via the Scholar Incentive program in 1961-62), a separate application form and need-analysis formula. That formula is quite streamlined, consisting mainly of verifiable state taxable income, and thus the application form has been a modest 22 questions long. Through that form, and functioning within the entitlement nature of the TAP program, the state's financial aid agency (HESC) has been able to provide quick turnaround time on application processing and give students estimates of actual awards based on verifiable information.

Another unique feature of TAP is that it is limited generally by tuition; Pell Grants have been deemed by the State Commissioner of Education to be non-duplicative of TAP because they meet more than tuition costs and therefore are not taken into account for the majority of TAP recipients (one exception being TAP recipients in prison programs as they have no room/board budgets). Thus, the TAP grant program has been insulated from the vagaries and delays of the Pell Grant processing system.

There are definitive reasons for the lack of direct processing coordination between Pell and TAP grants. The 1976 federal amendments to the Higher Education Act initiated the Multiple Data Entry (MDE) concept which allowed state agencies the option of serving as Pell Grant application data collectors. In assessing the opportunity that the legislation presented, New York declined the opportunity to participate as an MDE processor, with the Governor

commenting that the state might become interested if it were allowed to collect *and* correct the application data before forwarding it to a central processor.

Recent signals by the U.S. Department of Education lend new possibility to New York becoming more involved with Pell grants as the Department plans to expand the MDE concept to include the collection of application data, the correcting of application data, and the generation of a Pell Grant award, as provided under the 1986 Amendments to the Higher Education Act. A full adoption of such a concept in New York could lead to the development of a streamlined student application and award system which would allow a student to apply for several programs on a common application form and receive a common award certificate listing benefits by state and federal programs.

The common form concept was initially discussed in New York in 1977 at a forum hosted by the New York State Financial Aid Administrators Association. A proposal was presented in a report entitled "The Common Form and Beyond," which recommended simplification of student application for state and federal benefits through the development of a single form. However, other processing priorities associated with the rapid growth of the TAP program, and a general reluctance by New York to get too close to the unsteady federal grant process, limited the state's interest in such a concept until recently.

A major step has been taken by New York toward this objective through the establishment of a common student aid application form. That form, which was pilot-tested in 1986-87, builds upon existing forms of the two major national processors (the College Scholarship Service and American College Testing) by adding New York-specific questions regarding state TAP grants and guaranteed student loans. Statewide implementation of the New York State version of the Financial Aid Form (FAF) and Family Financial Statement (FFS) will begin with the 1988-89 academic year. Such an approach offers both pros and cons, a pro being the "one stop shopping" concept. A major con is that less sophisticated students from disadvantaged backgrounds will now be encouraged to fill out a very comprehensive and complicated application form in order to receive any state or federal student aid benefits, unless they opt for using the still-available New York State TAP form. The state plans a massive marketing and counseling program to facilitate student completion of the new form, but some initial difficulties will likely occur.

Other Types of Coordination

There have been other examples of coordination between state and federal government programs of student aid. For example, in 1976, the New York State Legislature revised the independent student definition for the TAP grant program, modeling it after the federal program criteria, but adding conditions to limit the ability of students under the age of 22 to claim financial independence from their parents. As the federal definition has been updated, New York's law has been modified to follow.

However, the 1986 Amendments to the Higher Education Act radically changed the federal standards for financial independence and the state has not yet followed suit. The new federal criteria appear to be based in part on the New York concept in that students under a certain age (24 in the federal statute, 22 in the state statute) cannot claim financial independence from their parents unless extreme hardship is proven. However, New York continues more stringent conditions up to age 34.

Federal Aid Falls Behind

Federal student aid comprises the majority of government-sponsored financial aid used in the state

TABLE N

Estimated Federal Student Aid in New York State for Selected Years

Program	(in millions) 1980-81	1986-87
Pell Grants	$ 312	$ 460
SSIG*	6	6
SEOG	30	31
NDSL/Perkins*	26	19
College Work Study*	52	47
Guaranteed Loans (Student and Parent)†	876	810
Total	$1,302	$1,373

Source: New York State Higher Education Services Corporation

* Federal share only

† Total volume, excluding multi-state guarantors

of New York. In 1986-87, government-sponsored student financial aid provided an estimated $1.9 billion of assistance in New York, 76 percent of which was from major federal sources. The Guaranteed Student Loan program was the largest single source of aid, providing $740 million that year or 38 percent of the total government-sponsored amount.

However, the dollar volume of federal aid in New York has stabilized over the last six years, increasing only 5 percent between 1980-81 and 1986-87. This has added pressure to the state Legislature to add funds to the state programs in order to reduce student net cost of attendance, a trend likely to continue in the foreseeable future.

Summary

In summary, the history of state-sponsored student financial assistance in New York has been one characterized by an early commitment and by tremendous grant funding growth. The state's objectives of enhancing educational access and preserving the diversity of public and independent higher education have been fairly well served by the financial assistance programs.

However, the state of financial aid administration in New York is one of flux. New departures in application form development and processing are about to occur. Fast growth in Guaranteed Student Loan program usage points to a need for more grant program funding. But the scale of the state's commitment, in terms of TAP program funding, is already proportionately and absolutely far above any other state.

After 122 years of student financial aid experience, New York is poised for major change to better position its delivery systems for the 1990's.

3. HIGHER EDUCATION AND STUDENT FINANCIAL AID IN THE PACIFIC RIM

Introduction

California's economy is increasingly turning west, all the way to the Far East. Two-way trade with countries in the Pacific Rim—home of the fastest growing economies in the world—is becoming an increasingly important area of public interest. The emergence of strong economies in Asia has many positive side benefits for California's economy, including:

- Almost one in nine jobs in California—including one in seven manufacturing jobs and perhaps as many as one in four in agriculture—relies on foreign trade.
- California's three largest trading partners are Japan, the Republic of China on Taiwan, and South Korea. Six of the state's top nine trading partners are in the Far East.
- In 1986, 82 percent of California's trade was conducted with Pacific Rim nations. (This figure is somewhat inflated, because it includes all U.S. imports and exports shipped through California.)
- The state depends on flows of foreign capital, particularly from Asia, for creation of thousands of jobs each year. Much of the capital ends up in the pockets of Californians working at local offices and plants of companies from Japan, South Korea, and Taiwan.

Given these trends, the emerging interest in California about the Asian countries in the Pacific Rim is understandable. Higher education is one area in which increased understanding can be beneficial. Asian countries in the Pacific Rim have a recent history of using multinational cooperation to promote economic development and to expand higher education opportunities. During the past year, there has been a concerted effort by the State of California and municipalities in the state to expand trading partnerships with Asian countries through joint economic ventures. In the long run, a better understanding of education and training needs in Asian countries can help the state of California build stronger foundations for new, cooperative patterns of trade and economic development with our Pacific Rim neighbors. The purpose of this paper is to begin to explore the educational needs, educational policies, and programs of Pacific Rim countries, and their relevance to California. Student financial aid must be an important element in the relationship of California to the Pacific Rim.

California's New Trading Partners

The Pacific Rim is generally considered to include the countries that rim the Pacific Ocean. This includes four developed countries (the U.S., Canada,

Australia and Japan) and a relatively large number of newly industrializing and underdeveloped countries in Asia, the South Pacific and the Americas. California's most important trading partners in this group are the developed countries, the newly industrializing countries in Asia (especially South Korea and Taiwan) and Mexico. These countries also compete with California in the world economy.

The emergence of California's Pacific Rim neighbors as trading partners is recent and has resulted from a rapid period of industrialization in these countries. Asia, with the exception of Japan, took a longer period to achieve economic "recovery" after World War II than Europe, largely because the countries were less developed economically before the war. In Asia, as in Europe, there was extensive multinational cooperation in efforts to promote economic recovery and development after the war. The Colombo plan in Asia, like the Marshall plan in Europe, is an organized multinational effort to promote economic recovery and development. Today the Colombo plan continues to sponsor multinational agreements aimed at promoting economic development long after the Marshall plan was phased out in Europe. Through the Colombo plan and other multinational agreements—such as the Association of Southeast Asian Nations (ASEAN)—Asian countries gained experience with cooperative approaches to promoting technological development in part by expanding technical training opportunities in all levels of post-secondary education. There are now three decades of experience in Asia with multinational cooperation in the economic development process, and higher education has played an important role in this process.

The two primary ways the U.S. and European countries supported the development of Asian countries after World War II were direct aid and loans. An important lesson learned for many of the newly industrializing countries in Asia was that they could not finance meaningful development exclusively with loans. The balance of trade was a critical issue in their ability to repay loans: one of the early lessons emerging from developing countries' experience in trying to raise their growth rate and standards of living was that there is an extremely close interconnection between the domestic pattern of industrial development and the nature of the trade and payments regime. Certainly the same issues—the balance of trade and the size of our national debt—are critical to future economic growth in the U.S. Many newly industrializing countries in Asia began to develop more rapidly economically when they achieved a more favorable balance between trade and debt.

Over the past two decades the newly industrializing countries in Asia have evolved increasingly sophisticated approaches to balancing industrial development and international trade in their national plans. Industrial growth can happen in two ways: 1) new industries can arise where output is to be sold on the domestic market, replacing imports; or 2) new industries can be developed whose output is expected to sell on the international market. Countries can take either approach, or a combined approach. The general pattern of development for many of the newly industrializing countries in Asia was first to emphasize domestic-replacement policies in their plans for industrial development, then to shift to an emphasis on export development. The problem with the domestic-replacement approach for developing countries is that expanding beyond a certain point requires depressing prices further than would be true in international markets, which have a capacity to absorb more industrial output.

However, if industrial development policies shift before it becomes necessary to depress internal prices, then continued economic development is more likely. Recent analyses of the relationship between trade and industrialization have found that export-oriented policies are generally more effective in expanding employment in developing countries. In fact, in some Asian countries the domestic population pays more for domestic products than we pay in the U.S. for the same products (for example, this is evident in countries with new car industries). The problem for the U.S. (and California) is that use of the domestic-replacement approach by developing countries can mean a shrinkage of our traditional markets. Unfortunately, as the newly industrializing countries in Asia have become more effective with these export-oriented policies, the export market has become more commpetitive for the U.S. (and California). And if these same countries do not change their protectionist strategies at home when their industries shift to an international focus, then U.S. companies can be at a disadvantage at home and abroad. One way out of this dilemma is through joint economic ventures—an approach that may pay good dividends in California. Certainly a better understanding of industrialization and trade policies in Pacific Rim countries can help inform the state's economic development policies.

Investment in Human Capital

Investment in human capital has been an important part of the industrialization strategy in most Asian countries. Typically, these countries control industrialization policy, manpower planning, and education policy in a centralized planning agency. This has created opportunities to use education more effectively to promote economic development. For example, the Colombo Plan Staff College for Technician Education was created about 15 years ago as part of a multinational agreement among Far Eastern countries to promote development of skilled labor. In several Asian and Southeast Asian countries there has been rapid expansion in technician training. The availability of well-trained, low-priced technicians has allowed these countries to continue industrial expansion, and even to modernize, while controlling the costs of production. Thus, the investment in technical education (or vocational education) may not have a high payoff in its rate of return to the individual, but it can promote economic development, as well as help the graduates gain entry into the skilled labor market. In fact, research on the substitution of labor, capital and skill levels in the industrialization process in developing countries is now revealing that differences in the skill composition of the labor force are more important in affecting comparative advantage than are differences in capital/labor endowment. Many developing countries in Asia have taken advantage of these factors in their planning for economic development. A better understanding of the connection between education and industrialization in Asia should help inform the development of more competitive education, economic development, and trade strategies in California.

California higher education has taken steps in recent years to expand its emphasis on the Pacific Rim studies, in part as a response to recent initiatives by the Governor and the state legislature to expand international studies. International studies programs with a focus on the Pacific region can play an important role in expanding the awareness of California's business community about economic development in the region. Certainly some of these programs should maintain a focus on the relationship between education, economic development, industrialization, and trade balance in Asia. There are also other more direct ways that higher education in the state can become directly involved in the economic development process. For example, multinational agreements (or partnerships) to provide postsecondary training opportunities in California for students from Asian countries can expand our knowledge of economic development and trade in the Pacific Rim, as well as build better networks between the business community in California and the business communities in Asian countries.

Higher Education and Economic Development

The role of higher education in the economic development process in newly emerging countries is most appropriately viewed in the context of the patterns of national development. During the colonial period, the developing country usually "borrows" the structure of its higher education system from the colonizing country. In Asia, the British had a strong influence on several countries during the colonial period, including Hong Kong, Singapore, Malaysia, India, and Australia. The American system was adopted in the Philippines, the Dutch in Indonesia, and the French in Vietnam. A few countries, like Thailand and Japan, did not have a clearly distinguished colonial period and tended to borrow features in their systems from different nations, as was the case in the U.S. during its early history.

During the post-war period the American system of higher education had a strong influence on the development of higher education systems in Japan, Taiwan, and South Korea. These countries also have more private institutions that provide higher education opportunities than is the case in countries influenced by the British. Building partnerships in these countries can be made easier by the commonalities between our educational systems.

Many Asian countries (India, Singapore, Hong Kong and Malaysia) are part of the British Commonwealth. They have a common pattern of educational delivery. Universities are usually elite institutions organized according to the British model, with chief administrators called Vice Chancellors, who lack the authority of college administrators in the U.S. These institutions usually serve a smaller percentage of high school graduates than universities in the U.S. or countries that adopted the U.S. model. At the other end of the spectrum are technical institutes and polytechnics that train technicians. In most of Asia (except India) these technical institutions are a fairly recent development. In between these extremes there are

usually other types of four-year colleges, such as engineering colleges (Bangladesh and Pakistan), colleges of advanced education (Australia) and teacher training institutions (in most countries). However, in most of these countries (except India and Australia) the systems of higher education have not yet expanded to meet domestic demand. A better understanding of the British system of higher education, and how it has evolved in Asian countries, is needed in the California higher education community if we are to evolve stronger partnerships with Asian countries.

The colonizing country can still exert a strong influence on the development of higher education systems for countries in the Pacific Rim. Very often international aid has come most freely from the colonizing country and there is usually more evidence of exchange students and staff within these bilateral relationships. In fact, the period since World War II has been characterized as a "neocolonial" period for education in developing countries: a new form of dependency, neocolonialism, emerged from basic inequalities between industrialized and third world countries. In the Asian Commonwealth countries, many who can afford to study abroad are still attracted to Britain as a first choice. For example, in Hong Kong senior civil servants are provided subsidies to send their school-age children to the United Kingdom for their secondary schooling. As school-age children and their parents look toward higher education, they naturally "think British." However, with the growing trade linkages between Asian countries and the U.S., educational exchange should be increasingly important. It can help create a stronger sense here and in Asia, of the "Pacific Rim community." Since educational planning in most Asian countries is centralized and coordinated with economic development strategies, contact with senior government planners may be needed to achieve breakthroughs of this type.

International aid, especially loans from the World Bank and the Asia Development Bank, continue to play a large role in the development of higher education systems in Asia. International aid dollars frequently pay for buildings, training and employing academic staff, and supporting study abroad. International foundations, such as the Carnegie Foundation in the U.S., have also played an important role in the development process. In spite of the emerging equality in trade, and even a trade deficit for the U.S., the pattern of cooperation in higher education has remained a dependent one. A possible way to achieve a breakthrough with newly industrializing countries in Asia (such as Singapore, Malaysia, Thailand and Taiwan) is to seek government-to-government agreements, or partnerships, for providing educational services that meet the manpower goals set in their national plans. Through these types of agreements, Asians can gain a better understanding of the California business environment in these countries, and the reverse. It could also provide a better foundation in the state for building business partnerships.

With the emergence of strong trading partnerships in the Pacific Rim there is the potential at least for new patterns of cooperation and exchange in higher education. There are many apparent commonalities in the types of planning and management problems that confront higher education systems in the Far East and the U.S., although their systems are generally less well developed and more centralized. Hopefully, at some point in the future, there will be more opportunities for exchange between institutions of higher education in the Pacific Rim that are based on cooperation rather than dependency. For example, there is in fact a Pacific Region Association of Higher Education that is playing a role in facilitating exchange of information, if not cooperation, in the Pacific Rim. However, there should also be opportunities for exchange of information about institutional and government planning and management. In fact, government-to-government partnerships—or institution-to-government partnerships—may be the best way to promote educational exchange. For example, the University of California at Berkeley runs a training program for Hong Kong civil servants that is highly regarded by that government. One benefit of the program is that its "graduates" leave UCB with a good, first-hand understanding of many public agencies and programs in California. This type of program can be of great value to the California state government, as well as to business and education communities in the state, if they are expanded.

There are many ways in which California might become more actively involved in promoting partnerships with Asian and Southeast Asian countries involving the state's higher education institutions. Some of the areas where cooperative projects are possible include:

- Applied research and development projects involving California universities, especially large development projects;
- Training programs that involve California institutions in overseas delivery, in addition to programs that bring Asian students to the U.S. (such programs are often included in the large development projects); and
- Cooperative strategies (or multinational agreements) that encourage countries in the region to send their overseas students to California institutions.

These are the types of international projects in which colleges and universities are typically engaged. An increased concentration of these types of projects between California institutions and countries in the Pacific Rim could help California to build a better understanding of the diverse cultures in the Pacific Rim.

Participation in Higher Education

There are major differences in the percent of the population participating in higher education in industrialized countries compared to the less developed countries, although movement is generally in the same direction, toward wider access. The global pattern during the past thirty years has been toward wider participation in higher education.

Global trends in enrollment by level of education are mixed. At the first (or primary) level, participation rates have nearly reached a universal level worldwide. However, at the upper levels participation is much lower. At third (or postsecondary) levels, the countries in Asia are only marginally ahead of the countries in Africa in their enrollment rates and are far behind America. This disparity in higher education participation is also evident when enrollment ratios by age group are examined. In America, over one third (35.7%) of the 18- to 20-year-olds, the traditional, higher education age group, were enrolled in some form of postsecondary education in 1985, while in Asia less than one eighth (12.5%) were enrolled. Also in Asia men are two times more likely to attend college than women, while in America men and women enroll at similar rates.

One cause of the disparity in higher education enrollment rates is that participation in primary education has historically been much lower in poorer and less developed countries than in richer countries. Many of the poor in underdeveloped settings miss the opportunity to get ahead from the very start. In contrast, most developed countries have nearly universal attendance in primary education. When countries begin a process of industrialization, there is a tendency to establish universal primary education as an explicit goal in national education plans. This is nearly uniformly the case in Asia, where even the least developed countries, like Bangladesh, have established universal access at the primary level as a national goal.

International studies of rates of return in education consistently find that primary education has the highest expected rate of return, followed by secondary education, then by higher education. Also the expected reteurns from higher education are likely to drop with increases in the percentage participating in higher education, unless a country is industrializing. When a country is industrializing, higher education can take on greater value for a larger percentage of the population.

Among the countries in Asia, Japan, Taiwan, South Korea, India and the Philippines have relatively high rates of enrollment at all levels of education. Yet, many other countries in the region continue to have relatively low participation rates. However, the relationship between expansion in the participation rate in national systems of education and industrialization is not well established. Some countries, such as Mexico and the Philippines, have been successful in expanding educational participation, but not in achieving economic development. It is important to recognize that education is just one of the factors that contribute to economic development. Industrialization and trade strategies are also important. The newly industrializing countries in Asia have had some success at coordinating these policies.

Postsecondary attainment, especially in technical fields, has been important in the industrialization process in Asia's newly industrializing countries. In some countries (e.g., Taiwan, South Korea and the Philippines), private, for-profit training organizations have emerged to fill the void. In these countries there are relatively large numbers of students attending "two-year" institutions in the private sector. Also, new inroads are needed in the less developed Asian countries in educational planning, as well as in cooperation between education and industry, to facilitate expansion of educational opportunities. However, many of the traditional technical programs

in the less developed Asian countries are not the ones needed for the industrialization process, a problem that plagues many countries in the region. For example, technical expertise in "air conditioning" and "fisheries" are not the skills needed to facilitate growth in electronic technologies, yet these types of specialties have been emphasized in the technician programs in some less developed countries in Asia.

Global and regional figures on higher education illustrate that expansion of higher education participation is still an important issue to many countries in Asia. However, California's principal trading partners in Asia—e.g., Japan, South Korea, Taiwan—have made substantial gains in third level participation rates. Yet there is a need even in these countries, especially in specialized training, that cannot easily be provided at home. In these cases opportunities for overseas study are often sought in the U.S. and Europe.

Student Exchange

The exchange of students has historically been an important area of international cooperation in higher education. Other than the supply of finance for building and equipment and gifts in kind (e.g., paper), the two main methods of educational aid remain the supply of personnel and the financing of students and trainees for study abroad. Many international aid projects provide financial resources for study abroad, usually in the country providing the financial support.

Study abroad has played an important role in the development process for many Asian countries since World War II and study in the U.S. is on the upswing. Expansion of foreign enrollment by Asian countries, especially in technical fields, could be a way of making more rapid progress in the level of educational attainment and their economic development. For California higher education, the continued enrollment of students from Asia could be a way of building better foundations for our new trading partnerships.

California colleges and universities currently have a substantial enrollment from countries in the Pacific Rim. In 1985-86 there were 47,587 foreign students enrolled in California institutions of higher education, which was almost 14% of the total number of foreign students enrolled in U.S. institutions. Nine of the top 15 home countries of all foreign students in the U.S. are on the Pacific Rim. Enrollment by students from the Pacific Rim may be an important area for building better partnerships between California's higher education institutions and Pacific Rim countries.

It may be in the long-term interest of the state of California to invest more in research and training programs that expand our knowledge about other Pacific Rim countries, especially Asian countries, and to develop educational programs that focus on them. This is currently being done at several institutions in the state. This type of development not only enables California to take advantage of expanding opportunities for having students from Pacific Rim countries study in the state, but it also expands knowledge in the state about its new trading partners.

It also may be in the interest of the state of California to explore the prospect of building better partnerships betweeen California's institutions of higher education and the countries in the Pacific Rim that are seeking quality educational training. Higher education partnerships—cooperative ventures to provide educational services in California for students from Asian nations in the Pacific region—can work to the advantage of the state of California by providing a better understanding of the people and economies in these nations. There are at least three issues that need to be explored further:

- What educational and training needs of Pacific Rim countries cannot yet be met by their indigenous institutions?
- Are there academic programs in California institutions that can easily be adapted to meet these needs?
- What type of state actions can best facilitate the cooperative development of partnerships between California's higher education institutions and the countries in the Pacific Rim?

At first these questions might seem odd or unnecessary, as might the notion that some form of state action is needed. In California, as in the rest of the U.S., there has been an implicit belief that education is a marketplace. Those who hold this belief may assume that the demand for educational services by students from Pacific Rim countries should determine the types of responses institutions make. The problem is that most Asian countries have a centralized approach to manpower and educational planning. In fact, decisions about where students study

are often made at a national level. Therefore, the most appropriate way for California to build cooperative ventures in education and training with countries in Asia may be to interact directly with government planners.

Student Financial Aid

In developed countries student financial aid is an important means of expanding or equalizing the opportunity for postsecondary education. In the U.S., the public investment in student financial aid expanded dramatically in the 1960's and 1970's, and has leveled considerably in the 1980's. There is a complex structure of federal grant, work and loan programs, complemented by state and institutional aid programs. In comaprison to the countries in the Pacific Rim, California is one of the leaders.

The other developed countries in the Pacific Rim also have student aid programs. The Japanese government, for example, maintains a grant program for needy students, but the "grants" must eventually be repaid by the student. The Japanese example exemplifies a value system evident in many Asian countries, that is, that the individual should pay for his own college education, even if he is poor. The provision of "repayable grants" is more consistent with this philosophy than giving "free grants." In contrast, Australia has a grant program that has historically provided grants to a larger percentage of students than do the federal programs in the U.S. The Australian grant program has many similarities to the grant schemes in the United Kingdom. A relatively smaller percentage of the traditional, college-age population in the U.K. and Australia than in the U.S. attend college, but the government is more generous to those who do attend. However, educational loans are not widely used in Australia and therefore the overall percentage of students receiving aid may be greater in California than even in Australia.

Generally the less developed countries in Asia are less likely to provide financial aid and provide smaller amounts to fewer students when they do. Occasionally there are modest grant programs for students from poor families operated at a national level. There is also evidence in several countries that extended families combine their resources to support college attendance. For example, it is common in the Philippines for poorer relations to live with wealthier relatives while in college, possibly providing some assistance around the home to offset some of the living costs. Presumably the desirability of financial aid would increase as a country industrializes and its higher education system expands. Thus, in the future, California may be seen as a model for how student aid programs can be developed in the region.

Unfortunately, very little is known about student aid in Asia. There have been a few comparative studies of student aid in the U.S. and Europe, but none in recent years involving Asian countries. If one reads the national plans and government reports describing the educational systems, there is seldom reference to student aid. There is, for example, a modest grant program in the Philippines, which has a higher education system modeled after the U.S. system. However, the Commonwealth countries in Asia apparently have not placed the same emphasis on student assistance that is evident in the U.K.—it may be part of the British model that was not borrowed. Very often when scholarship programs are mentioned in these documents, they refer to assistance for foreign study. Therefore, this topic merits further investigation.

However, the developing countries in Asia often have scholarship money available to support foreign study, especially in areas of national manpower need. National plans and publications often reference these programs and many of the development projects include provisions for scholarship programs. This pattern is likely to persist at least for the next decade. Very often the economic and educational development projects funded by the World Bank and Asian Development Bank include allocations for scholarships to study abroad. Also, in many Asian countries, study abroad generally is valued more highly than study in domestic institutions. Therefore, middle- and upper-income families will make sacrifices to support study abroad, even if scholarships are not available.

It may well be in the interest of the state of California to facilitate the development of partnerships between higher education institutions in the state and national governments in the Pacific Rim that are tailored to meet their manpower needs in these countries. Such developments will also increase our understanding of Pacific neighbors through new forms of cooperation.

Building New Types of Partnerships

Over the past decade, the Asian countries in the Pacific Rim have become California's largest and perhaps most important trading partners. In the next decade some of the Southeast Asian countries are likely to join Japan, Taiwan and South Korea as major industrialized nations and to increase in importance as trading partners. While there are intense rivalries among the Far Eastern countries, there is also a history of cooperation in economic and educational development.

Multinational cooperation has played an important role in the economic development process in Asia since World War II. Education and training have been treated as a key ingredient in national plans in most Asian and Southeast Asian countries. In fact, educational and manpower planning are usually directly linked together. Countries in Asia have also often worked cooperatively with each other on the development of their educational systems.

While the industrialized countries in Asia are likely to remain competitors with U.S. (and California) companies in world markets, there are many areas in which ventures can have economic cooperative benefits to our Pacific neighbors as well as to California. Cooperative ventures in higher education is one such area. If education is successful in building a greater understanding in California of the economies and business cultures in Asia, then cooperative ventures in education should have positive spin-offs for the California business community as well.

The state of California, through Assembly Resolution 82 in 1986, officially recognized the importance of educational exchange between California and countries in the Pacific Rim. The areas in which cooperation between California higher education institutions and the nations of the Pacific Rim seem most beneficial are joint research and development projects and the delivery of specially tailored educational services that support the economic development goals of California and our Pacific neighbors. New types of partnerships in higher education can help build a better foundation for cooperative economic development in the Pacific Rim. However, to inform the planning process, better information is needed about:

- The types of postsecondary training needs that are not currently being met by higher education in Pacific Rim countries and that national manpower projections suggest cannot be met, in the near term, by their higher education institutions;
- The types of financial aid programs that are available in Pacific Rim countries, the number of students funded in these programs, their level of subsidy, and the types of student aid that are available to students who study abroad;
- The nations that are in the initial stages of large developmental projects (from the World Bank or the Asian Development Bank) that have large overseas training programs;
- The curricular needs that should be addressed in cooperative higher education programs;
- The types of cooperative research projects that can support joint-economic development of cooperative trade agreements.

There is, in fact, a need for better information about opportunities for student exchange and for cooperative research projects that can promote joint-economic development through cooperative partnerships between California and our Pacific neighbors. After all, expansion of educational exchange and cooperative research have the potential to promote cooperative economic development in the Pacific Rim.

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